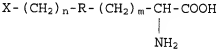
IN THE CLAIMS:

Please amend claims 1 and 3 and add claims 25-29. The current status of the claims is reflected in the below listing of claims.

1. (Currently amended) A halogenated amino acid analogue having the general formula:



wherein:

X is a radioactive halogen;

m is 0 or 1;

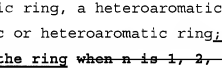
n is ~~0,~~ 1, 2, 3, 4, 5, or 6;

~~R is (C_1 – C_6) alkyl optionally substituted with thioether or ether oxygen atom when n is 0;~~ and

R is an aromatic ring, a heteroaromatic ring, or a substituted aromatic or heteroaromatic ring**; and the X-$(CH_2)_n$- is a side chain on the ring** ~~when n is 1, 2, 3, 4, 5 or 6~~.

2. (Cancelled)

3. (Currently amended) A halogenated amino acid analogue having the general formula:



wherein:

X is a radioactive halogen;

m is 0 or 1;

n is ~~0,~~ 1, 2, 3, 4, 5, or 6;

~~R is (C_1 – C_6) alkyl optionally substituted with thioether or ether oxygen atom when n is 0;~~ and

R is phenyl, hydroxyphenyl, pyridyl, or hydroxypyridyl

~~when n is 1, 2, 3, 4, 5 or 6~~.

4. (Cancelled)

5. (Previously amended) The analogue of claim 1, wherein the halogen is ^{18}F.

6. (Previously amended) The analogue of claim 1, wherein the halogen is ^{123}I.

Claims 7 - 8. (Cancelled)

9. (Original) The analogue of claim 1, wherein the analogue is selected from the group consisting of: [^{18}F] labeled L,D-2-amino-3-(2-fluoromethyl-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoromethyl-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(4-fluoromethyl-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(2-fluoroethyl-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoroethyl-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(4-fluoroethyl-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoromethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(4-fluoromethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(5-fluoromethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(6-fluoromethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoroethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(4-fluoroethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(5-fluoroethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(6-fluoroethyl-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(2-fluoromethyl-4-hydroxy-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(5-fluoromethyl-3-hydroxy-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(6-fluoromethyl-3-hydroxy-phenyl)-propionic acid;

[^{18}F] labeled L,D-2-amino-3-(2-fluoroethyl-4-hydroxy-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(5-fluoroethyl-3-hydroxy-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(6-fluoroethyl-3-hydroxy-phenyl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoromethyl-5-hydroxy-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoroethyl-5-hydroxy-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoromethyl-6-hydroxy-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(4-fluoromethyl-6-hydroxy-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(3-fluoroethyl-6-hydroxy-pyridin-2-yl)-propionic acid; [^{18}F] labeled L,D-2-amino-3-(4-fluoroethyl-6-hydroxy-pyridin-2-yl)-propionic acid; [^{18}F] labeled alanine; [^{18}F] labeled valine; [^{18}F] labeled leucine; [^{18}F] labeled isoleucine; and [^{18}F] labeled methionine.

10. (Original) A pharmaceutical composition comprising the analogue of claim 1 and at least one of an excipient, carrier and diluent.

11. (Original) The pharmaceutical composition of claim 10, wherein the pharmaceutical composition is used as a tracer in at least one of Positron Emission Tomography (PET) and functional Magnetic Resonance Imaging (MRI).

Claims 12 - 24. (Cancelled)

25. (New) A method for diagnosing a patient for the presence of tumors and/or metastases, the method comprising:

administering a diagnostically effective amount of the analogue of claim 1 into the body of a patient; and

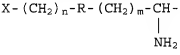
visualizing localization of the analogue in the body of the patient.

26. (New) The method of claim 25 wherein the visualizing

includes at least one of Positron Emission Tomography (PET) and functional Magnetic Resonance Imaging (MRI).

27. (New) A method for preparing the analogue of claim 1, the method comprising:

providing a precursor having the general formula



wherein:

X is a leaving group selected from the group consisting of tosyl, mesityl, triflate and a halogen; and

NH_2 and COOH are protected; and

substituting a radioactive halogen for the leaving group of the precursor.

28. (New) The method of claim 27 wherein the substitution comprises aliphatic nucleophilic substitution of tosyl, mesityl, or triflate with radioactive fluorine.

29. (New) The method of claim 27 wherein the leaving group is a halogen, and the substitution comprises exchange of the leaving group with radioactive fluorine.